REMARKS

Discussion of Drawing

Figure 2 has been amended to correct a drawing error. In particular, a conductor assembly (58) has been redrawn to illustrate a bridging portion (68) which is described in the specification on page 8, lines 15-20. No new matter has been added to Figure 2. Applicant respectfully requests acceptance of the amendment to the drawing.

Discussion of Claims

In the Office Action, claims 1-13 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the Office Action, claims 1, 2, 4, 5, 8, 9, 12, and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,559,951 to Dahl et al.

In the Office Action, claims 1, 4, 5, and 8-13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,348,548 to Chardack.

In the Office Action, claims 1-5, 7-9, 12, 15-17, 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,785,576 to Verness.

In the Office Action, claims 6 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. §112, second paragraph, set forth in this Office Action and/or to include all of the limitations of the base claim and any intervening claims.

In response thereto, claims 1, 4, and 7 have been cancelled and claims 2, 3, 5, 6, and 8 have been amended. Accordingly, claims 2, 3, 5, 6, 8-13, and 15-20 are now pending.

Preliminary Matter

Claims 1-13 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. With regards to claims 1 and 9, it is noted that "the lumen" recited in claims 1, line 4 and claim 9, line 5 do not lack antecedent basis. In claim 1 (now cancelled), the "at least one longitudinally-extending lumen" recited in line 3 is the same "lumen" recited in line 4. Similarly, in claim 9, the "at least one longitudinally-extending lumen" recited in line 3 is the same "lumen" recited in line 4. Accordingly, it is respectfully submitted that the rejection of claims 1-13 under 35 U.S.C. §112, second paragraph, be withdrawn.

Claim 7 has been cancelled in response to the rejection under 35 U.S.C. §112, second paragraph.

Independent Claim 2

Claim 2 has been rewritten in independent form and includes all of the limitations of base claim 1. Claim 2 recites a lead comprising a lead body defining at least one longitudinally-extending lumen and a plurality of individual electrical conductors contained in the lumen of the lead body and extending between the proximal and distal ends. The plurality of individual conductors share a common insulating coating that insulates the plurality of individual conductors from each other, each of the plurality of individual conductors comprise a same electrically conductive material, and each of the plurality of individual conductors comprises a multifilar cable conductor.

The Dahl et al. reference discloses a catheter assembly having a central tube formed from a polymeric material. Embedded within the cylindrical walls of the tube are a plurality of conductors. Each of the conductors is in the form of a helix with the individual helices being longitudinally offset and electrically isolated by the polymeric material. As such, the Dahl et al. reference does not disclose or suggest individual conductors comprising a multifilar cable conductor and the individual conductors sharing a common insulating coating that insulates the individual conductors from each other. According to the specification of the present application (see page 1, line 29

through page 2, line 4), a multifilar cable conductor is used in place of helically wound coils. In other words, a multifilar cable conductor has a non-coiled structure.

The Chardak reference discloses an implantable electrode. Figures 4 and 5 illustrate a first embodiment in which helical coil conductors (4 and 5) are contained in a lumen of a insulating body (6), and Figures 8 and 9 illustrate a second embodiment in which helical coil conductors (4 and 5) are contained in a lumen of an insulating jacket (60). Nowhere does the Chardak reference disclose or suggest individual conductors comprising a multifilar cable conductor and the individual conductors sharing a common insulating coating that insulates the individual conductors from each other. The Chardak reference discloses helical conductors which are not coated with an insulating coating.

The Verness reference discloses medical electrical leads. In the embodiment illustrated in Figure 20, a conductor cable (414) and a safety cable (420) share a common lubricious coating (415). The conductor cable and safety cable are in longitudinal contact with each other such that the common lubricious coating does not insulate the individual cables from each other. In the embodiment illustrated in Figure 21, a conductor cable (414) is surrounded by a first electrically insulative layer (502) and a safety cable (420) is surrounded by a second electrically insulative layer (503). In this embodiment, the two conductors do not share a common electrically insulative layer. The first and second electrically insulative layers are discrete from each other.

Accordingly, it is respectfully submitted that claim 2 is in condition for allowance.

Dependent Claim 5

Claim 5 depends from claim 2 and is similarly patentable. Accordingly, it is respectfully submitted that claim 5 is in condition for allowance.

Independent Claim 3

Claim 3 has been rewritten in independent form and includes all of the limitations of base claim 1. Claim 3 recites each of a plurality of individual electrical conductors comprising a non-coiled monofilament wire. For at least the same reasons discussed above with regards to claim 2, it is respectfully submitted that claim 3 is in condition for allowance.

Independent Claim 6

In the Office Action, claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, claim 6 has been rewritten in independent form including all of the limitations of base claim 1 and intervening claim 5. It is respectfully submitted that amended claim 6 is in condition for allowance.

Dependent Claim 8

Claim 8 depends from claim 6 and is similarly patentable. Accordingly, it is respectfully submitted that claim 6 is in condition for allowance.

Independent Claim 9

Claim 9 recites a lead comprising a lead body and a plurality of individual electrical conductors. The lead body defines at least one longitudinally-extending lumen. The plurality of individual electrical conductors are contained in the lumen of lead body and share a common insulating coating that insulates the plurality of individual conductors from each other. The plurality of electrical conductors and the common insulating coating comprise a conductor assembly, and the conductor assembly has a helical configuration defining a longitudinally-extending passageway for receiving a stylet or guide wire.

The Dahl et al. reference discloses a catheter assembly having a central tube formed from a polymeric material. Embedded within the cylindrical walls of the tube are a plurality of conductors. Each of the conductors is in the form of a helix with the individual helices being longitudinally offset and electrically isolated by the polymeric material. Nowhere does the Dahl et al. reference disclose or suggest a conductor assembly having a helical configuration. In the Dahl et al. reference, the conductor assembly comprises helical conductors embedded within the cylindrical wall of the tube. As such, the conductor assembly has a tubular configuration.

The Chardak reference discloses an implantable electrode. Figures 4 and 5 illustrate a first embodiment comprising a conductor assembly having helical coil conductors (4 and 5). The conductor assembly is contained within a lumen of an insulating body (6). Figures 8 and 9 illustrate a second embodiment comprising a conductor assembly having helical coil conductors (4 and 5). The conductor assembly is contained within a lumen of an insulating jacket (60). Nowhere does the Chardak reference disclose or suggest a conductor assembly having a common insulating coating, nor does the Chardak reference disclose or suggest a conductor assembly having a helical configuration.

The Verness reference discloses medical electrical leads. In the various embodiment illustrated in the Verness reference, the conductor assemblies comprise a plurality of helical coil conductors. Nowhere does the Verness reference disclose or suggest the conductor assemblies comprising a common insulating coating which insulates a plurality of individual conductors from each other. In the Verness reference, the plurality of helical coil conductors, such as coiled conductor (116) illustrated in Figure 4, are not coated with a common insulating coating.

Accordingly, it is respectfully submitted that claim 9 is in condition for allowance.

Dependent Claims 10-13

Claims 10-13 depend from claim 9 and are similarly patentable. Accordingly, it is respectfully submitted that these claims are in condition for allowance.

Independent Claim 15

For at least the same reasons discussed above with regards to claim 2, it is respectfully submitted that claim 15 is in condition for allowance.

Dependent Claims 16-20

Claims 16-20 depend from claim 15 and are similarly patentable. Accordingly, it is respectfully submitted that these claims are in condition for allowance.

CONCLUSION

In light of the above claim amendments and remarks, it is respectfully submitted that the application is in condition for allowance, and an early notice of allowance is requested.

Respectfully submitted,

12/28/04 Date

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Enclosure: Sheet 1 (Figures 1, 2 (Replacement), and 3)

CUSTOMER NUMBER: 36802

AMENDMENTS TO THE DRAWING

Enclosed herewith is replacement Sheet 1 in which Figure 2 includes the desired changes without markings and which comply with § 1.84.